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core
said dimerization domain is an immunoglobulin Fab constant domain.

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--103. (New) A Class II Major Histocompatibility Complex fusion protein comprising a heterodimer of a first polypeptide chain and a second polypeptide chain; wherein said first polypeptide chain comprises a fusion of, toward the N-terminus, at least an extracellular domain of an MHC Class II α chain and, toward the C-terminus, a first dimerization domain;

wherein said second polypeptide chain comprises a fusion of, toward the N-terminus, at least an extracellular domain of an MHC Class II β chain and, toward the C-terminus, a second dimerization domain; and

wherein said first dimerization domain and said second dimerization domain associate in solution at physiological conditions to form a heterodimer capable of selectively binding an MHC binding peptide.

104. (New) A Class II Major Histocompatibility Complex fusion protein comprising a heterodimer of a first polypeptide chain and a second polypeptide chain; wherein said first polypeptide chain comprises a fusion of, toward the N-terminus, at least an extracellular domain of an MHC Class II α chain and, toward the C-terminus, an immunoglobulin heavy chain C_H1 constant region;

wherein said second polypeptide chain comprises a fusion of, toward the N-terminus, at least an extracellular domain of an MHC Class II β chain and, toward the C-terminus, an immunoglobulin light chain constant region; and

wherein said immunoglobulin heavy chain C_H1 constant region and said immunoglobulin light chain constant region dimerize in solution at physiological conditions to form a heterodimer capable of selectively binding an MHC binding peptide.

105. (New) A Class II Major Histocompatibility Complex fusion protein comprising

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a heterodimer of a first polypeptide chain and a second polypeptide chain;
wherein said first polypeptide chain comprises a fusion of, toward the N-terminus,
at least an extracellular domain of an MHC Class II α chain and, toward the C-terminus,
an immunoglobulin light chain constant region;

wherein said second polypeptide chain comprises a fusion of, toward the N-terminus,
at least an extracellular domain of an MHC Class II β chain and, toward the C-terminus,
an immunoglobulin heavy chain C_H1 constant region; and

wherein said immunoglobulin heavy chain C_H1 constant region and said
immunoglobulin light chain constant region dimerize in solution at physiological
conditions to form a heterodimer capable of selectively binding an MHC binding peptide.

106. (New) A Class II Major Histocompatibility Complex fusion protein as in 104
further comprising

an immunoglobulin Fc region covalently joined to said immunoglobulin heavy
chain C_H1 constant region.

107. (New) A Class II Major Histocompatibility Complex fusion protein as in claim 106
wherein

said immunoglobulin Fc region is selected from the group consisting of IgE and
IgM Fc regions.

108. (New) A Class II Major Histocompatibility Complex fusion protein as in claim 107
further comprising

a flexible molecular linker interposed between and covalently joining said
immunoglobulin heavy chain C_H1 constant region and immunoglobulin Fc region.

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109. (New) A Class II Major Histocompatibility Complex fusion protein as in claim 106 wherein

said immunoglobulin Fc region is selected from the group consisting of IgA, IgD and IgG Fc regions.

110. (New) A Class II Major Histocompatibility Complex fusion protein as in claim 109 further comprising

a flexible molecular linker interposed between and covalently joining said immunoglobulin heavy chain C_H1 constant region and immunoglobulin Fc region.

111. (New) A Class II Major Histocompatibility Complex fusion protein as in claim 110 wherein

said flexible molecular linker is an immunoglobulin hinge region.

112. (New) A multivalent Class II Major Histocompatibility Complex fusion protein comprising

two Class II Major Histocompatibility Complex fusion proteins of claim 106 wherein,

said Fc regions are covalently joined by at least one disulfide bond.

113. (New) A multivalent Class II Major Histocompatibility Complex fusion protein comprising

five pairs of Class II Major Histocompatibility Complex fusion proteins of claim 106 wherein,

said Fc regions are IgM regions, each said pair is covalently joined by at least one disulfide bond between Fc regions of said pair, and said five pairs are covalently joined

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